

IN THE SPECIFICATION

Please amend the specification beginning on page 41, paragraph 100 through page 43, paragraph 103 as follows:

[0100] The refinement pass signals 704 and clean up pass signals 705 are input to mask 705715 with feedback count signal 708. Count signal 708 is the current coefficient position in the 4x4 region, e.g., 0...15. In response to these inputs, mask 705715 masks what has already been done, as indicated by count 708, including only coefficients that are not being coded yet. For example, if three coefficients have already been processed, mask 705715 masks the three signal lines of each of the refinement and cleanup outputs (704 and 705).

[0101] Mask 705715 also generates 2 outputs to priority encoder 706 representing signal 704 and 705 with certain signals masked to one (in one embodiment). These outputs of mask 705715 are masked refinement and masked cleanup indications (e.g., signals).

[0102] In response to the two inputs, priority encoder 706 finds the next non-refinement bit (or coefficient) and the next non-cleanup bit for the significance propagation pass and inputs these to control logic 709. In one embodiment, priority encoder 706 is a zero-finding priority encoder. In so doing, priority encoder 706 converts the current position of the bit (or coefficient) in the codeblock into a count of leading zeros. In one embodiment, this is performed using a truth table such as

Input						Output
1	x	x	x	x	x	0
0	1	x	x	x	x	1
0	0	1	x	x	x	2
			.			.
			.			.
			.			.

[0103] Mask ~~705~~715, priority encoder 706, and selection logic 707 may comprise a processing unit that receives outputs from determine pass unit 702 and generates outputs indicating the next non-refinement coefficient and next non-cleanup coefficient and the pass for the current coefficient.